

Notice of Allowability

Application No.

09/916,241

Examiner

Jonathan S. Crepeau

Applicant(s)

VAAL ET AL.

Art Unit

1746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment of 2/27/04.
2. ☒ The allowed claim(s) is/are 1-43.
3. ☒ The drawings filed on 25 July 2001 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date 1/7/04
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

DETAILED ACTION

Examiner's Amendment

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows:

IN THE SPECIFICATION:

On page 25, line 12, after "(Atty. Docket No. 130109.427)" insert --, now abandoned--.

Terminal Disclaimer

2. The terminal disclaimer filed on February 27, 2004 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of Serial No. 09/916,240 has been reviewed and is accepted. The terminal disclaimer has been recorded.

Allowable Subject Matter

3. Claims 1-43 are allowed.
4. The following is an examiner's statement of reasons for allowance (the reasons are identical to those set forth in the previous Office action but are reiterated herein):

Each of independent claims 1, 12, 21, 31, and 38 recites method or apparatus for measuring the oxygen concentration of ambient air in the vicinity of a fuel cell system, and ceasing operation of the system when the measured oxygen concentration falls below a threshold value. The art of record does not teach or fairly suggest these limitations. JP 8-185879 discloses a method in which nitrogen is flowed through a fuel electrode flow field and a decrease in oxygen concentration on the air electrode side is used to detect gas leakage through the electrolyte. The reference is deficient because the oxygen concentration of the ambient air surrounding the fuel cell is not measured and the fuel cell is already in a shutdown state when the method is performed. JP 8-88014 discloses monitoring the oxygen concentration of an anode exhaust gas and shutting down the system when the oxygen level is above a specified value. However, this reference does not fairly suggest monitoring the oxygen concentration of the ambient air surrounding the fuel cell or that the system is shut down when the value is *below* a threshold value. JP 7-169481 discloses a fuel cell contained within a nitrogen-filled container (1), wherein hydrogen and oxygen levels within the container are monitored and the fuel cell shut down when either level is too high. However, this reference does not fairly suggest that the enclosure contains "ambient air" or that the system is shut down when the oxygen level is *below* a threshold value. Accordingly, the instant claims contain allowable subject matter.

Art Unit: 1746

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonathan Crepeau whose telephone number is (571) 272-1299. The examiner can normally be reached Monday-Friday from 9:30 AM - 6:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski, can be reached at (571) 272-1302. The phone number for the organization where this application or proceeding is assigned is (571) 272-1700. Documents may be faxed to the central fax server at (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jonathan Crepeau
Patent Examiner
Art Unit 1746
May 2, 2004